NEW STATIONS FOR EUROPEAN PLANT IMMIGRANTS. - In my field work for the past few months in eastern West Virginia, making extensive economic botanical collections, I repeatedly inquired for any plants from which brooms were made, and was shown a wild specimen of Cytisus scoparius (L.) Link, by a native who informed me that it was sometimes used to make "snow" brooms. The plant was growing on an old deforested hillside, one mile east of Pickens, Randolph County, and was 200 yards or more from any path or cultivated field, with no evidence of previous habitations. None of the natives had a common name for this plant, and few had noticed it, except a German, who was acquainted with the plant in Europe. He informed me that it was called "Ginster" in the old country. The range of Cytisus scoparius is given as Nova Scotia and the coast region of Massachusetts, Delaware and Virginia, where it is often used as a sandbinder.

Close to the *Cytisus*, I found several specimens of *Ulex europaeus* L. This was called "thistle" by the natives, doubtless on account of its excessively prickly character. The range of *Ulex* is given from southern New York to eastern Virginia near the coast, where it is cultivated as noted under the above species. I have not found these plants elsewhere in the state.

Specimens of both species are preserved in the botanical department of the Field Museum of Natural History.

HURON H. SMITH

FIELD MUSEUM OF NATURAL HISTORY, CHICAGO, ILLINOIS

PROCEEDINGS OF THE CLUB

February 24, 1909

The Club met at the Museum of the New York Botanical Garden at 3:30 P. M. In the absence of the President and both Vice-Presidents, Mr. Fred J. Seaver was called to the chair. Eight persons were in attendance.

After the reading and approval of the minutes of the meeting for February 9, the following names were presented for membership: Mrs. Pamela Eakin, 38 Oakwood Avenue, Arlington, N. J.,

and Miss Gertrude L. Cannon, 1786 Clay Avenue, New York City.

The announced scientific program was then presented:

"Collecting Fungi in Jamaica," by Dr. W. A. Murrill.

This paper has been published in full in the February Journal of the New York Botanical Garden.

"Cypripedium in the Light of its Segregates," by Mr. G. V. Nash.

Mr. Nash exhibited living plants and herbarium specimens illustrating the four segregates now recognized by orchidologists, and formerly considered as parts of the genus *Cypripedium*. These segregates are: *Cypripedium*, *Selenipedium*, *Paphiopedilum* and *Phragmipedium*. These divide themselves into two groups. In the first group are *Cypripedium* and *Selenipedium*, characterized by the usually long, leafy stem and broad, flat, thin, many-nerved leaves which are convolute in vernation, and the withering perianth persistent on the ovary. In *Cypripedium* the ovary is 1-celled, and the seeds elongate with a thin testa. This genus is of north temperate distribution, its representatives, about 30 in number, being found in North America, Europe, and Asia.

The other genus of this group, *Selenipedium*, has a 3-celled ovary, and the seeds nearly globose with a crustaceous testa. This is found from Panama to northern South America and is rare. It contains only 3 species, which are seldom seen in cultivation.

The second group is at once recognized by the conduplicate vernation of its long, narrow, fleshy, strap-shaped leaves, and the deciduous perianth. The flowers are borne on scapes, which are rarely somewhat leafy below. To this group belong the remaining two genera, *Paphiopedilum* and *Phragmipedium*. In the former the ovary is 1-celled and the sepals imbricate in the bud. The most evident character, however, differentiating this at once from *Phragmipedium*, is in the lip, which has the margin of the opening straight not infolded. The scape is also commonly 1-flowered, the exception being with more than one. There are some 50 species known in this genus, which is entirely Old World, being generally distributed in tropical Asia and the Malay region.

The genus Phragmipedium is entirely New World, occurring

in northern South America and Panama. It contains in the neighborhood of a dozen species, and is at once separated from *Paphiopedilum* by the character of the lip in which the margin of the opening is marked by a broad infolded portion. In addition to this the ovary is 3-celled and the sepals valvate in the bud; the scape, moreover, bears several, sometimes many, flowers.

We have then in the New World three of the genera, two, *Phragmipedium* and *Selenipedium* not known elsewhere, and *Cypripedium* which it shares in distribution with the Old World. The only strictly Old World genus is *Paphiopedilum*.

The meeting adjourned at 4:30 P. M.

Percy Wilson,

Secretary

OF INTEREST TO TEACHERS

COLLEGE ENTRANCE BOTANY (CONCLUDED)

SPECIFICATIONS OF THE TOPICS TO BE STUDIED

Part I. The General Principles of (A) Anatomy and Morphology, (B) Physiology and Ecology

A. Anatomy and Morphology.

The Seed. Four types (dicotyledon without and with endosperm, a monocotyledon and a gymnosperm); structure and homologous parts. Food supply; experimental determination of its nature and value. Phenomena of germination and growth of embryo into a seedling (including bursting from the seed, assumption of position and unfolding of parts).

The Shoot. Gross anatomy of a typical shoot; including the relationships of position of leaf, stem (and root), the arrangement of leaves and buds on the stem, and deviations (through light adjustment, etc.) from symmetry. Buds, and the mode of origin of new leaf and stem; winter buds in particular. Specialized and metamorphosed shoots (stems and leaves). General structure and distribution of the leading tissues of the shoot; annual growth; shedding of bark and leaves.

The Root. Gross anatomy of a typical root; position and origin of secondary roots; hair-zone, cap and growing-point.